AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the above-referenced application.

Listing of Claims

1. **(Currently Amended)** A fuse assembly comprising:

a fuse element prepared in a substantially non-linear form, the fuse element comprising at least two terminals, the at least two terminals comprising a first terminal and a second terminal;

at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap coupled to said first terminal and a second conductive endcap coupled to said second terminal~~, wherein~~

~~said first conductive endcap comprises a first end coupled to said first terminal and a second end, and~~

~~said second conductive endcap comprises a first end coupled to said second terminal and a second end~~; and

a fuse body comprising a dielectric material adapted to substantially enclose the fuse element between the at least two endcaps, wherein

a first portion of the dielectric material is positioned in an area bounded by said fuse element and a line connecting said first terminal and said second terminal to impede arcing across the fuse element, and

a second portion of the dielectric material is positioned directly between said first conductive endcap and said second conductive endcap ~~occupies an area from said first ends to said second ends~~ to impede arcing between said first conductive endcap and said second conductive endcap.

2. (Previously Presented) The fuse assembly of claim 1, wherein the substantially non-linear form of the fuse element comprises a curve.

3. (Previously Presented) The fuse assembly of claim 1, wherein

the fuse element is capable of experiencing arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and

the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

4. (Previously Presented) The fuse assembly of claim 3, wherein the dielectric material comprises a superior dielectric material.

5. (Previously Presented) The fuse assembly of claim 3, wherein the path is consistent with a shape of the first portion of the dielectric material.

6. (Previously Presented) The fuse assembly of claim 3, wherein the arcing causes formation of a conductive path along a surface of the first portion of the dielectric material.

7. (Original) The fuse assembly of claim 6, wherein the conductive path is comprised of carbon.

8. (Original) The fuse assembly of claim 6, wherein the conductive path reduces an insulating value of the dielectric material.

9-11 (Canceled)

12. (Previously Presented) The fuse assembly of claim 3, wherein said first portion of the dielectric material which forces the arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

13-14 (Canceled)

15. (Previously Presented) The fuse assembly of claim 3, wherein the opening is created by an excessive current passing through the fuse element, the excessive current causing a meltdown of at least a portion of the fuse element.

16-17 (Canceled)

18. **(Currently Amended)** A method of reducing a footprint of a fuse element, the method comprising:

preparing the fuse element in a substantially non-linear form, the fuse element comprising at least two terminals, the at least two terminals comprising a first terminal and a second terminal, the footprint being reduced by adjusting a distance between the first terminal and the second terminal;

coupling the fuse element between at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap <u>coupled to said first terminal</u> and a second conductive endcap <u>coupled to said second terminal</u>~~, wherein~~

~~each of said at least two conductive endcaps comprises a first end and a second end, and~~

~~said coupling comprises,~~

~~coupling said first terminal to said first end of said first conductive endcap, and~~

~~coupling said second terminal to said first end of said second conductive endcap~~; and

enclosing the fuse element in a dielectric material, wherein

a first portion of said dielectric material is positioned in an area bounded by said fuse element and a line connecting said first terminal and said second terminal, and

a second portion of said dielectric material <u>is positioned directly between said first conductive endcap and said second conductive endcap</u> ~~occupies an area from said first ends to said second ends~~ to impede arcing between said first conductive endcap and said second conductive endcap.

19. (Previously Presented) The method of claim 18, wherein the substantially non-linear form of the fuse element comprises a curve.

20. (Canceled)

21. (Previously Presented) The method of claim 18, wherein the dielectric material comprises a superior dielectric material.

22. (Previously Presented) The method of claim 18, wherein the substantially non-linear form is consistent with a shape of the first portion of the dielectric material.

23. (Previously Presented) The method of claim 18, wherein

the fuse element is capable of experiencing arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and

the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

24. (Previously Presented) The method of claim 23, wherein the arcing causes formation of a conductive path along a surface of ~~at least~~ the first portion of the dielectric material.

25. (Original) The method of claim 24, wherein the conductive path is comprised of carbon.

26. (Original) The method of claim 24, wherein the conductive path reduces an insulating value of the dielectric material.

27. (Previously Presented) The method of claim 24, wherein the first portion of the dielectric material which forces the arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

28. (Canceled)

29. (Previously Presented) The method of claim 23, wherein the opening is created by an excessive current passing through the fuse element, the excessive current causing a meltdown of at least a portion of the fuse element.

30-32 (Canceled)

33. **(Currently Amended)** A method of increasing dielectric separation between at least two terminals of a fuse element that experience arcing, the method comprising:

preparing the fuse element in a substantially non-linear form;

coupling the fuse element between at least two conductive endcaps, the at least two conductive endcaps comprising a first conductive endcap coupled to a first terminal of said at least two terminals and a second conductive endcap coupled to a second terminal of said at least two terminals~~,~~ ~~wherein~~

~~each of said at least two conductive endcaps comprises a first end and a second end, and~~

~~said coupling comprises,~~

~~coupling said first end of said first conductive endcap to a first terminal of said at least two terminals, and~~

~~coupling said first end of said second conductive endcap to a second terminal of said at least two terminals~~; and

enclosing the fuse element in a dielectric material, wherein

a first portion of said dielectric material is positioned in an area bounded by said fuse element and a line connecting said first terminal and said second terminal to impede arcing across the fuse element, and

a second portion of said dielectric material is positioned directly between said first conductive endcap and said second conductive endcap ~~occupies an area from said first ends to said second ends~~ to impede arcing between said first conductive endcap and said second conductive endcap.

34. (Canceled)

35. (Previously Presented) The method of claim 33, wherein the substantially non-linear form of the fuse element comprises a curve.

36. (Canceled).

37. (Previously Presented) The method of claim 33, wherein the dielectric material comprises a superior dielectric material.

38. (Previously Presented) The method of claim 33, wherein the substantially non-linear form is consistent with a shape of the first portion of the dielectric material.

39. (Previously Presented) The method of claim 33, wherein the arcing causes formation of a conductive path along a surface of the first portion of the dielectric material.

40. (Original) The method of claim 39, wherein the conductive path is comprised of carbon.

41. (Original) The method of claim 39, wherein the conductive path reduces an insulating value of the dielectric material.

42. (Previously Presented) The method of claim 33, wherein

the fuse element experiences arcing as a result of an opening being created in at least a portion of the fuse element, the opening having two ends, and

the first portion of the dielectric material forces arcing between the two ends of the opening to traverse a path consistent with the substantially non-linear form.

43. (Previously Presented) The method of claim 42, wherein the first portion of the dielectric material which forces the arcing between the two ends of the opening to traverse the path introduces an increased amount of dielectric separation.

44-45 (Canceled)

46. (Previously Presented) The method of claim 42, wherein the opening is created by an excessive current passing through the fuse element, the excessive current causing a meltdown of said at least the portion of the fuse element.

47-68 (Canceled)

69. **(Currently Amended)** A method of impeding arcing occurring across a gap formed in a fuse element, the method comprising:

creating the gap in the fuse element, the gap being created as a result of heat generated in response to excessive current flowing through the fuse element, the fuse element being prepared in a substantially non-linear form; and

forcing the arcing across the gap to traverse a path consistent with the substantially non-linear form, wherein

said fuse element is enclosed by a dielectric material and comprises at least two terminals, the at least two terminals comprising a first terminal <u>coupled to a first conductive endcap</u> and a second terminal <u>coupled to a second conductive endcap,</u>

~~said first terminal is coupled to a first conductive endcap, the first conductive endcap comprising a first end coupled to said first terminal and a second end,~~

~~said second terminal is coupled to a second conductive endcap, the second conductive endcap comprising a first end coupled to said second terminal and a second end,~~

a first portion of said dielectric material is positioned in an area bounded by said fuse element and a line connecting said first terminal and said second terminal to impede the arcing, and

a second portion of said dielectric material <u>is positioned directly between said first conductive endcap and said second conductive endcap</u> ~~occupies an area from said first ends to said second ends~~ to impede arcing between said first conductive endcap and said second conductive endcap.

70. (Previously Presented) The method of claim 69, wherein the substantially non-linear form of the fuse element comprises a curve.

71-72 (Canceled)

73. (Previously Presented) The method of claim 69, wherein the dielectric material comprises a superior dielectric material.

74. (Previously Presented) The method of claim 69, wherein the path is consistent with a shape of the first portion of the dielectric material.

75. (Previously Presented) The method of claim 69, wherein the arcing causes formation of a conductive path along a surface of the first portion of the dielectric material.

76. (Original) The method of claim 75, wherein the conductive path is comprised of carbon.

77. (Original) The method of claim 75, wherein the conductive path reduces an insulating value of the dielectric material.

78-86 (Canceled)

87. (Original) The method of claim 69, wherein forcing the arcing across the gap to traverse the path introduces an increased amount of dielectric separation.

88-89 (Canceled)

90. (Original) The method of claim 69, wherein the heat generated causes a meltdown of at least a portion of the fuse element.

91. (Original) The method of claim 90, wherein the meltdown causes creation of the gap.

92. **(New)** The fuse assembly of claim 1, wherein

said second portion of the dielectric material is positioned substantially along an entire dimension of at least one of said first conductive endcap and said second conductive endcap, and

said entire dimension is generally perpendicular to said line connecting said first terminal and said second terminal.

93. **(New)** The fuse assembly of claim 1, wherein
said second portion of the dielectric material is configured to force arcing between said first conductive endcap and said second conductive endcap to traverse a path consistent with a substantially non-linear form.

94. **(New)** The fuse assembly of claim 1, wherein
said at least two conductive endcaps are configured to couple said fuse element to a substrate, and
said second portion of the dielectric material comprises a protrusion configured to be mated to a corresponding slot in said substrate.

95. **(New)** The method of claim 18, wherein
said second portion of said dielectric material is positioned substantially along an entire dimension of at least one of said first conductive endcap and said second conductive endcap, and
said entire dimension is generally perpendicular to said line connecting said first terminal and said second terminal.

96. **(New)** The method of claim 18, wherein
said second portion of said dielectric material is configured to force arcing between said first conductive endcap and said second conductive endcap to traverse a path consistent with a substantially non-linear form.

97. **(New)** The method of claim 18, wherein
said at least two conductive endcaps are configured to couple said fuse element to a substrate, and
said second portion of said dielectric material comprises a protrusion configured to be mated to a corresponding slot in said substrate.

98. **(New)** The method of claim 33, wherein
said second portion of said dielectric material is positioned substantially along an entire dimension of at least one of said first conductive endcap and said second conductive endcap, and
said entire dimension is generally perpendicular to said line connecting said first terminal and said second terminal.

99. **(New)** The method of claim 33, wherein
said second portion of said dielectric material is configured to force arcing between said first conductive endcap and said second conductive endcap to traverse a path consistent with a substantially non-linear form.

100. **(New)** The method of claim 33, wherein
said at least two conductive endcaps are configured to couple said fuse element to a substrate, and
said second portion of said dielectric material comprises a protrusion configured to be mated to a corresponding slot in said substrate.

101. **(New)** The method of claim 69, wherein
said second portion of said dielectric material is positioned substantially along an entire dimension of at least one of said first conductive endcap and said second conductive endcap, and
said entire dimension is generally perpendicular to said line connecting said first terminal and said second terminal.

102. **(New)** The method of claim 69, wherein
said second portion of said dielectric material is configured to force arcing between said first conductive endcap and said second conductive endcap to traverse a path consistent with a substantially non-linear form.

103. **(New)** The method of claim 69, wherein
said conductive endcaps are configured to couple said fuse element to a substrate, and
said second portion of said dielectric material comprises a protrusion configured to be mated to a corresponding slot in said substrate.